

BEFORE THE UTAH SOLID AND HAZARDOUS WASTE CONTROL BOARD

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In the Matter of: : NOTICE OF VIOLATION

Deseret Chemical Depot :

Deseret Chemical Depot, Tooele County, Utah :

UT5210090002 : No. 0811041

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This **NOTICE OF VIOLATION (NOV)** is issued by the UTAH SOLID AND HAZARDOUS WASTE CONTROL BOARD (the Board) pursuant to the Utah Solid and Hazardous Waste Act (the Act), 19-6-101, et seq., Utah Code Annotated 1953, as amended (UCA). The Board has delegated to the Executive Secretary authority to issue such **NOTICES** in accordance with 19-6-107(7) of the Utah Code and R315- 12-2.2(a) of the Utah Administrative Code.

FINDINGS

1. The Deseret Chemical Depot (DCD) is a U.S. Army facility located in the State of Utah. The Chemical Agent Munitions Disposal System (CAMDS), the Tooele Chemical Agent Disposal Facility (TOCDF), and Storage Areas 2 and 10 are located at the DCD. The TOCDF is a Government Owned, Contractor Operated (GOCO) facility operated by EG&G.
2. The DCD, the CAMDS, and the TOCDF are each a "person" as defined in UCA 19-1-103(4) and are subject to all applicable provisions of the Utah Solid and Hazardous Waste Act and the Utah Administrative Code (the Rules).

3. The DCD, the CAMDS, and the TOCDF generate, treat, and store wastes defined as hazardous by R315-2 of the Rules. These wastes include, but are not limited to D001, D002, D003, D004, D005, D006, D007, D008, D011, F002, F003, F005, F999, and P999.
4. The DCD has a Hazardous Waste Permit (Permit) for storage of hazardous waste in containers and waste piles in buildings, and is subject to applicable generator requirements. The Permit for the DCD was issued to the United States Department of the Army, Deseret Chemical Depot.
5. The CAMDS had three permitted incinerators for the treatment of hazardous waste. The CAMDS also had seven permitted tank systems for the storage and treatment of hazardous waste, and several permitted miscellaneous treatment units for the treatment of hazardous waste. Currently, the CAMDS facility is being closed and is no longer operating as a treatment and disposal facility. The CAMDS is still permitted to store hazardous waste in tanks. The CAMDS is subject to applicable generator requirements. The Permit for the CAMDS was issued to the United States Department of the Army, Deseret Chemical Depot.
6. The TOCDF has a Permit for four incinerators to treat hazardous waste, three tank systems to store and treat hazardous waste, several miscellaneous treatment units to treat hazardous waste. The TOCDF is subject to applicable generator requirements. The Permit for the TOCDF was issued to the U.S. Army Chemical Materials Agency (Facility Owner, Facility Co-Permittee, Facility Co-Operator) and EG&G (Facility Co-Permittee, Facility Co-Operator).
7. Authorized inspectors of the Board conducted Compliance Evaluation Inspections (CEI) at the DCD, the CAMDS, and the TOCDF from October 2007 through September 2008. Additionally, the facilities submitted reports and letters documenting self-discovered non-compliances with their permits and other applicable rules. The following FINDINGS were documented at the DCD, the CAMDS, and the TOCDF during inspections and in the reports and letters mentioned in this paragraph:

#### **Deseret Chemical Depot**

- 7.1 R315-5-3.34 of the Rules [40 CFR 262.34] allows a generator of hazardous waste to accumulate hazardous waste on-site provided that the hazardous waste is placed in containers.

During the CEI at the DCD on September 3, 2008, a Division inspector documented hazardous waste in the form of old monitoring system tubing in Perimeter Shed 910. The tubing was used to inject dilute chemical agent solutions for testing of the monitoring equipment. Labeling on the tubes indicated that they were used with VX and GB solutions. The tubing was lying on the counter and was not in a container. The tubing is hazardous waste because it is residue from the treatment of P999 hazardous waste.

- 7.2 Condition I.M.1. of the DCD Part B Permit requires the Permittee, at all times, to properly operate and maintain all facilities and systems of treatment and control

(and related appurtenances) which are installed or used by the Permittee to achieve compliance with the conditions of this Permit. Proper operation and maintenance includes following the Permittee-approved Standard Operating Procedures (SOPs) that involve the management of hazardous waste.

During the CEI at the DCD on September 3, 2008, a Division inspector documented that the room in Building 1850, where RDTE dilute solutions are stored in a refrigerator, is not monitored for the presence of chemical agents. DCD Standard Operating Procedure (SOP) Number TT-0000-M-147 states that the room where the RDTE solutions refrigerator is located will be monitored by DAAMS on all workdays.

- 7.3 Condition III.C.1. of the DCD Part B Permit requires the Permittee to transfer hazardous waste from a container that is not in good condition or the container itself into a container that is in good condition, as soon as possible.

During the CEI on September 2, 2008, Division inspectors documented a 15-gallon metal drum located in Building 4107 that was not in good condition. Container number A4107M0821705 contains waste tetrachloroethylene. DCD personnel stated that the container had been dropped but did not know the date when this occurred. The material was declared a hazardous waste on August 4, 2008, but was not placed into a container in good condition until the time of the CEI, when it was placed into an overpack container while Division inspectors observed.

- 7.4 Condition III.E.1. of the DCD Part B Permit requires the Permittee to keep all containers of hazardous waste closed during storage except when adding or removing waste.

During the CEI on September 2, 2008, a Division inspector documented two 55-gallon drums (D001), numbers CSITEZ0817711 and CSITEZ0817712, in Building 4107 that were not closed. The drums had defective drum rings which were not capable of keeping the lids closed on the drums. The inspectors observed gaps between the drum lids and the top of the drum and were able to open them wider without removing the rings. The containers were generated as waste on June 25, 2008, by the TVA at the CAMDS site. The two drums were placed into overpack containers at the time of the CEI while Division inspectors observed.

#### **Chemical Agent Munitions Disposal System**

- 7.5 R315-5-3.34 of the Rules [40 CFR 262.34] allows a generator of hazardous waste to accumulate hazardous waste onsite provided that the hazardous waste is placed in containers, the containers are labeled as hazardous waste, dated, and kept closed except when adding or removing waste.

(a) During inspections of the CAMDS on May 15 and 16, 2008, a Division inspector documented 11 incidents of failure to place hazardous waste in containers, failure to close containers of hazardous waste when waste is not being added or removed from the containers, and failure to label containers of hazardous waste. The waste was F999 hazardous waste generated during closure of the Deactivation Furnace Pollution Abatement System.

(b) During an inspection of the CAMDS on August 6, 2008, Division inspectors documented a container of hazardous waste that was not labeled, dated or closed. The container was a five-gallon bucket containing chunks of metal that had been cut from the Deactivation Furnace Secondary Combustion Chamber duct. This material is an F999 hazardous waste.

7.6 Condition II.C.1. of the CAMDS Part B Permit requires the Permittee to follow the procedures included in Attachment 3 of the CAMDS Part B Permit. Attachment 3 contains The CAMDS Site Laboratory and Monitoring Quality Control Plan.

(a) Section 16.0 of Attachment 3 requires the Permittee to track and trend all line challenge data. During the CEI at the CAMDS on September 9, 2008, Division inspectors reviewing agent monitoring line challenge summary sheets and field documents found multiple incidents where line challenges had failed. Personnel at the CAMDS were unable to locate any of the failed challenge data in the monitoring database which is used to track failed challenges. At the request of Division inspectors, CAMDS representatives reviewed their records and provided documentation showing seven failures that had not been tracked and trended as required.

(b) Section 20 of Attachment 3 requires the Permittee to generate monthly proficiency reports. During the CEI at the CAMDS Lab on September 2, 2008, Division inspectors asked to see the monthly proficiency reports. The CAMDS was not able to provide these reports and inspectors learned that these reports were not being generated due to changes in personnel.

(c) Section 14.2.1 of Attachment 3 contains the range for QP and QL recoveries that is acceptable and does not require corrective action. During the CEI at the CAMDS Lab on September 2, 2008, Division inspectors documented one occasion where a QL sample had 71.37% recovery which is outside the required  $\pm 15\%$  range and one QP had 142% recovery which is outside the required  $\pm 40\%$  range. Both the QL and the QP were noted on the documents as being "In Control" but when inspectors asked for corrective action reports none were provided. No corrective action was taken as a result of these out-of-control samples.

(d) Section 11.0 of Attachment 3 requires that all actions associated with monitoring will be documented and carried out in accordance with the Permit and Army SOPs. Operation Number 1, paragraph 2i of SOP EMR33-10-99-01 requires documentation of all information regarding alarms. During an inspection of the CAMDS on August 18, 2008, a Division inspector documented that three alarms had occurred at Monitoring Station 3010 VX on August 12, 2008. Further investigation revealed that personnel at the CAMDS did not document the alarms on the NRT Daily Log Sheet for this station as required.

(e) Section 11.0 of Attachment 3 requires that all actions associated with monitoring taken by the Permittee be documented and carried out in accordance with the Permit and Army SOPs. Operation Number 1, Paragraph 2g of SOP EMR33-10-99-01 requires the NRT monitor that has alarmed to be agent challenged as soon as possible. During an inspection of the CAMDS on August 18, 2008, a Division inspector documented that three alarms had occurred at Monitoring Station 3010 VX on August 12, 2008. Further investigation revealed that personnel at the CAMDS did not perform required follow-up challenges to each of the alarms.

(f) Section 17.3 of Attachment 3 requires the Permittee to complete all mustard DAAMS station sample line challenges through the NOx filter. During an inspection of the CAMDS on August 20, 2008, Division inspectors learned that when the sample lines for mustard DAAMS tubes are being challenged at the CAMDS, the NOx filters are being removed so that the entire sample line system is not being tested.

(g) Attachment 3 references several procedures that are controlled by the CAMDS Part B Permit. SOP MON 33-00-99-08 is one of these procedures. Operation Number 1, Step 8 of this SOP states that the NRT monitor samples for five minutes. During an inspection of the CAMDS on August 20, 2008, Division inspectors observed CAMDS personnel as they challenged the sample lines for mustard NRT stations. Division inspectors observed that operators were using a three-minute sample time instead of the required five-minute sample time.

(h) Table 8-2 in Attachment 3 requires the Permittee to conduct a consecutive three-day baseline at each NRT monitoring station. The baseline is comprised of three daily challenges for each station with at least four hours between challenges. During an inspection of the CAMDS on August 13, 2008, a Division inspector documented that at Monitoring Station 3010, the daily baseline challenges performed on July 25, 26, and 27, 2008, were not performed in accordance with the CAMDS Part B Permit. The inspector documented that in four of the nine challenges performed, the time interval between challenges was less than the four hours required.

(i) Section 17.3.1. of Attachment 3 requires the Permittee to replace NOx pre-filters at monitoring stations every 14 days. During an inspection of the CAMDS

on May 15, 2008, a Division inspector documented that the NOx pre-filter at perimeter Monitoring Station 907 had not been changed in accordance with the 14-day cycle. The inspector documented that the filter had been changed on April 10, 2008, but was not changed again until May 8, 2008, for a total of 28 days between changes.

### **Tooele Chemical Agent Disposal Facility**

- 7.7 R315-5-3.34 of the Rules [40 CFR 262.34] requires a generator of hazardous waste to implement the contingency plan immediately whenever there is a release that could threaten human health or the environment.

During an inspection of the TOCDF Chemical Assessment Laboratory (CAL) on June 26, 2006, a Division inspector learned that on June 17, 2008, a vial of dilute chemical agent spilled in one of the rooms at the CAL. Operators failed to implement the contingency plan by masking and alerting others in the CAL to mask in response to a spill, as required by TE-LOP-551 (CAL Contingencies).

- 7.8 R315-5-3.34 of the Rules [40 CFR 262.34] allows a generator of hazardous waste to accumulate hazardous waste onsite provided that the hazardous waste is placed in containers.

During an inspection of the TOCDF on April 30, 2008, while inspecting the Metal Parts Furnace Cool Down Area, a Division inspector observed ash and burn tray residue under the conveyor. Facility procedures call for workers to clean up the ash and residue at the end of each shift. The last tray of waste exited the Metal Parts Furnace on April 25, 2008. The ash and residue should have been cleaned up and containerized at the end of the first shift following the removal of all treated waste from the tray. The Metal Parts Furnace was in an extended shutdown at the time of the inspection.

- 7.9 Condition I.M.1. of the TOCDF Part B Permit requires the Permittee to, at all times, properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Permittee to achieve compliance with the conditions of this Permit. Proper operation and maintenance includes following parts of permittee-approved Standard Operating Procedures (SOPs) that affect the management of hazardous waste.

(a) During an inspection of the TOCDF on August 7, 2008, Division inspectors learned that all carbon filter cartridges from the DPE/SCBA backpacks were being disposed of as solid waste. Procedure TE-SOP-061 (DSA Operations) requires personnel in the DSA to make a determination as to whether or not the used carbon cartridges from DPE/SCBA Backpacks were exposed to chemical agent and manage them appropriately depending on this determination. Inspectors learned that all cartridges removed from DPE/SCBA Backpacks are

being managed as non-hazardous waste without anyone reviewing records to determine if the filters were exposed to agent.

(b) During an inspection of the TOCDF on July 29, 2008, a Division inspector observed that workers monitoring bags of discarded DPE suits did not place tape over the holes made in the bags after the monitoring was complete. Procedure TE-SOP-092 (TOCDF Waste Management) requires operators to place tape over the probe hole in a bag of hazardous waste to seal the bag after monitoring the contents for the presence of chemical agent.

- 7.10 Condition I.U.5. of the TOCDF Part B Permit requires the Permittee to submit a written report of an incident, such as a spill of any quantity of P999 hazardous waste, to the Executive Secretary within 15 days of making oral notification of the incident.

The TOCDF reported in a letter dated September 11, 2008, that the Permittee failed to submit a written report within 15 days of July 31, 2008, when it was orally reported that two 155mm mustard projectiles leaked during operations in Explosives Containment Room B. The Executive Secretary did not receive the written report until August 21, 2008.

- 7.11 Condition II.C.1. of the TOCDF Part B Permit requires the Permittee to follow the Waste Analysis Plan contained in Attachment 2 to the TOCDF Part B Permit. Paragraph 2.2.1.12.3 of the Waste Analysis Plan requires the Permittee to enter a description of each secondary waste being fed to the Metal Parts Furnace in the facility operating record.

During the CEI at the TOCDF on September 15, 2008, Division inspectors documented one occasion where the description of the secondary waste placed in the facility Metal Parts Furnace operating record was not detailed enough for inspectors to identify the waste.

- 7.12 Condition II.C.1. of the TOCDF Part B Permit requires the Permittee to follow the Waste Analysis Plan contained in Attachment 2 to the TOCDF Part B Permit. The Waste Analysis Plan contains a list of procedures that the Permittee uses during the analysis of waste. Procedure TE-LOP-572 is one of these procedures.

(a) During the CEI at the TOCDF September 4, 2008, Division inspectors documented that personnel at the Chemical Assessment Laboratory (CAL) had not followed Lab Operating Procedure TE-LOP-572. The Extraction Analysis Worksheet for Sample 8092.34 shows that deionized water was used for the preparation blank when sodium chloride should have been used.

(b) During the CEI at the TOCDF September 4, 2008, Division inspectors documented that personnel at the Chemical Assessment Laboratory (CAL) had not followed Lab Operating Procedure TE-LOP-572. Documentation for sample

numbers 8213.32 and 8213.33 has QL recoveries that are outside the  $\pm 15\%$  range. The procedure requires corrective action and a corrective action report to be written when the QL falls outside this range. The TOCDF was unable to provide inspectors with the report or any other documentation of corrective action.

- 7.13 Condition VIII.F.3. of the TOCDF Part B Permit states that the Permittee shall not exceed the explosives limit for each ECR as specified in Attachment 14 to the TOCDF Part B Permit. Table 14-4-1 specifies that the maximum amount of explosive allowed in each ECR is 15 pounds.

The TOCDF reported in a letter dated June 25, 2008, that the explosive storage limit for one of the Explosive Containment Rooms was exceeded on June 8, 2008, during the treatment of 155mm projectiles. The storage limit was exceeded by four pounds when 38 bursters accumulated before operators observed that the feed gate was not operating. In a follow-up to this report, a Division inspector learned that operators do not verify proper operation of the feed gate with CCTV cameras during daily operations.

- 7.14 Attachment 22 to the TOCDF Part B Permit contains the Agent Monitoring Plan for the facility. Paragraph 22.17.2.1 of the Agent Monitoring Plan requires the Permittee to collect and analyze the DAAMS tubes associated with an ACAMS monitor that is not monitoring correctly.

During the CEI at the TOCDF on September 16, 2008, Division inspectors reviewing agent monitoring records discovered that on September 13, 2008, the sample line for ACAMS AL468AH had failed two back-to-back challenges. The DAAMS tubes associated with this monitor were not collected and analyzed.

#### DETERMINATION OF VIOLATIONS

Based on the foregoing FINDINGS, the DCD, the CAMDS, and the TOCDF have violated provisions of the Rules applicable to their facilities and conditions of their Permits. Specifically, the following rules and permit conditions have been violated:

1. R315-5-3.34 of the Rules [40 CFR 262.34] by failing on more than one occasion to place hazardous waste into containers and to label, date and keep those containers closed. See Findings 7.1, 7.5, and 7.8.
2. R315-5-3.34 of the Rules [40 CFR 262.34] by failing to carry out the provisions of a contingency plan. See Finding 7.7
3. Condition I.M.1. of the DCD Part B Permit by failing to follow parts of facility procedures that affect the management of hazardous waste. See Finding 7.2.



4. Condition III.C.1. of the DCD Part B Permit by failing to transfer containers of hazardous waste that are not in good condition into containers that are in good condition. See Finding 7.3.
5. Condition III.E.1. of the DCD Part B Permit by failing to keep all containers of hazardous waste closed during storage. See Finding 7.4.
6. Condition II.C.1. of the CAMDS Part B Permit by failing to track and trend all monitoring line challenge data. See Finding 7.6(a).
7. Condition II.C.1. of the CAMDS Part B Permit by failing to generate monthly proficiency reports. See Finding 7.6(b).
8. Condition II.C.1. of the CAMDS Part B Permit by failing to take corrective action and document this corrective action when QP and QL recoveries were outside the allowed ranges. See Finding 7.6(c).
9. Condition II.C.1. of the CAMDS Part B Permit by failing to document all actions taken in association with monitoring activities in accordance with Army SOPs. See Finding 7.6(d) and 7.6(e).
10. Condition II.C.1. of the CAMDS Part B Permit by failing to complete mustard DAAMS monitoring station sample line challenges through the NOx filter. See Finding 7.6(f).
11. Condition II.C.1. of the CAMDS Part B Permit failing to perform NRT monitoring challenges using a five minute sample time. See Finding 7.6(g).
12. Condition II.C.1. of the CAMDS Part B Permit by failing to conduct three-day baselines on NRT monitoring stations in accordance with permit requirements. See Finding 7.6(h).
13. Condition II.C.1. of the CAMDS Part B Permit by failing to replace NOx pre-filters every 14 days as required. See Finding 7.6(i).
14. Condition I.M.1. of the TOCDF Part B Permit by failing to follow parts of facility standard operating procedures that affect the management of hazardous waste. See Finding 7.9.
15. Condition I.U.5. of the TOCDF Part B Permit by failing to submit a written report within 15 days of making an oral notification of an incident. See Finding 7.10.
16. Condition II.C.1. of the TOCDF Part B Permit by failing to enter waste descriptions into the facility operating record as required by the Waste Analysis Plan. See Finding 7.11.

17. Condition II.C.1. of the TOCDF Part B Permit by failing to follow procedures specified in the Waste Analysis Plan. See Finding 7.12.
18. Condition VIII.F.3. of the TOCDF Part B Permit by exceeding the explosive limit of the Explosive Containment Room. See Finding 7.13.
19. Attachment 22 of the TOCDF Part B Permit by failing to collect and analyze DAAMS tubes associated with an ACAMS monitor that was not monitoring correctly. See Finding 7.14.

COMPLIANCE, OPPORTUNITY FOR HEARING

This **NOTICE OF VIOLATION (NOV)** is effective immediately and shall become final unless the DCD, CAMDS, and TOCDF request a hearing within thirty (30) days pursuant to R315-12-2.2(b) of the Rules. Section 19-6-113 of the Utah Code Annotated also provides that violators of the Solid and Hazardous Waste Act or any order, plan, rule or other requirement issued thereunder may be subject to a civil penalty of up to thirteen thousand (\$13,000) dollars per day for each day of violation.

Dated this 5 day of January, 2009

By: Dennis R. Downs  
Dennis R. Downs, Executive Secretary  
Utah Solid and Hazardous Waste Control Board